

CLAIMS

1. (presently amended) For reducing and preventing ice deposits on a suspended line, a device that applies a perpendicular force to the power line displacing it laterally and then releasing the line suddenly, providing lateral vibration to the suspended line, the device comprising: an energy gathering module operatively connected to an energy storage module, wherein the energy storage module is operatively connected via a trigger mechanism to an energy delivery module, wherein the energy delivery module is further connected to one or more suspended lines, and wherein the device may be activated via the trigger mechanism to cause energy to be transferred from the energy delivery module to the suspended line so as to cause motion in the line, thus reducing and preventing ice deposits.
2. (previously amended) The device of claim 1 wherein the energy gathering module is adapted to gather energy from a non-electrical energy source.
3. (Original) The device of claim 1 wherein the energy gathering module comprises a wind driven turbine.
4. (Original) The device of claim 1 wherein the energy gathering module comprises a shape memory alloy actuator.
5. (Original) The device of claim 1 wherein the energy gathering module comprises a pendulum and with a clutch/gear assembly.
6. (Original) The device of claim 1 wherein the energy gathering module comprises a solenoid.
7. (Original) The device of claim 1 wherein the energy gathering module comprises a photovoltaic cell.

8. (Original) The device of claim 1 wherein the energy gathering module comprises a direct wire tap to a power line.

9. (Original) The device of claim 1 wherein the energy gathering module comprises an inductive coil wrapped around a power line.

10. (Original) The device of claim 1 wherein the energy storage module comprises an elastic storage device.

11. (Original) The device of claim 10 wherein the elastic storage device comprises one or more springs.

12. (Original) The device of claim 1 wherein the energy storage module comprises a raised weight.

13. (Original) The device of claim 1 wherein the energy storage module comprises a pressurized vessel.

14. (Original) The device of claim 1 wherein the energy storage module comprises a battery.

15. (Original) The device of claim 1 wherein the energy storage module comprises a capacitor.

16. (Original) The device of claim 1 wherein the trigger mechanism is triggered by meteorological conditions.

17. (Original) The device of claim 1 wherein the trigger mechanism is triggered by line conditions.

18. (Original) The device of claim 1 wherein the trigger mechanism is triggered remotely.
19. (Original) The device of claim 1 wherein the trigger mechanism is selected from the group consisting of: a bimetallic strip, a shape memory alloy actuator, a container/cantilever system, and a weight/slide system.
20. (Original) The device of claim 1 wherein the energy delivery module is selected from the group consisting of: a cam shaft and a solenoid.